Content

Safety Precaution

This STB has been designed and manufactured to satisfy the international safety standards. Please read the following safety precautions carefully before operating this receiver.

Main Supply:
Before operating, please check the units operating voltage is 90~250V A C 50/60Hz.

Overload:
Do not overload a wall outlet, extension cord or adapter, neither use damaged
power cord or touch it with wet hand as this may result in electric shock.

Liquid:
The receiver shall not be exposed to dripping or splashing water, and that no objects filled with liquids, such as base, shall be placed on the apparatus.

Ventilation:
Keep the slots on top of the receiver uncover to allow sufficient airflow to the unit. Do not put the receiver on soft furnishings or carpets.Do not expose the receiver to direct light or do not place it near a heater or in humid conditions. Do not stack other electronic equipments on top of the receiver.

Cleaning:
Plug out the receiver from the wall outlet before cleaning. Clean the receiver by a soft cloth or mild solution of washing-up liquid (no solvents).

Connection:
Disconnect the receiver from the mains when you connect it to satellite LNB or disconnect it from LNB. Failure would possibily cause damage to the LNB.

Location:
Put the receiver indoor in order to avoid lightening, raining or sunlight.

Uncover:
Do not remove the cover, to reduce the risk of electric shock.Contact qualified and licensed service personnel to repair the receiver, or contact your dealer.

1. Reference

1.1 General Features

MPEG-2 & Fully DVB Compliant

PLL RF-Modulator UHF 21~69 with PAL B/G,I,D/K

Multi LNB Control by DiSEqC 1.0,1.2,1.3(USALS)

SCPC/MCPC Receivable from C / Ku-Band Satellites

Digital Tuner with Loop-Through

PAL/NTSC Conversion

Variable Aspect Ratio (4:3,16:9) for TV

4-digi 7-segment LED Display

RS232 Port for Updating software and Additional Information

User Friendly OSD Menu with Full Function

Installation by Easy Setup Guide

256 Colors Graphic User Interface

Easy Tuning and Network Search

Multi Language Menu (English / Italian / French / Spanish / Germany /

Turkish / Arabic / Russian / Persian)

7-Days EPG (Electronic Program Guide) for On-Screen Channel Information

PIG,Small Screen Picture on EPG

PIP, Picture in Picture

Super fast 800 pages OSD Teletext Supported and VBI Teletext Inserted

8 Favorite Group and Parent Lock Function

100 Satellites, 6000 Channels and 4000 transponders

ZOOM and Multi TImer function

Audio Tone for Tuning signal

6 Kind of Sort function for Channels

1.2 Accessories

- User manual
- Remote Control Unit
- A/V Cable
- Batteries

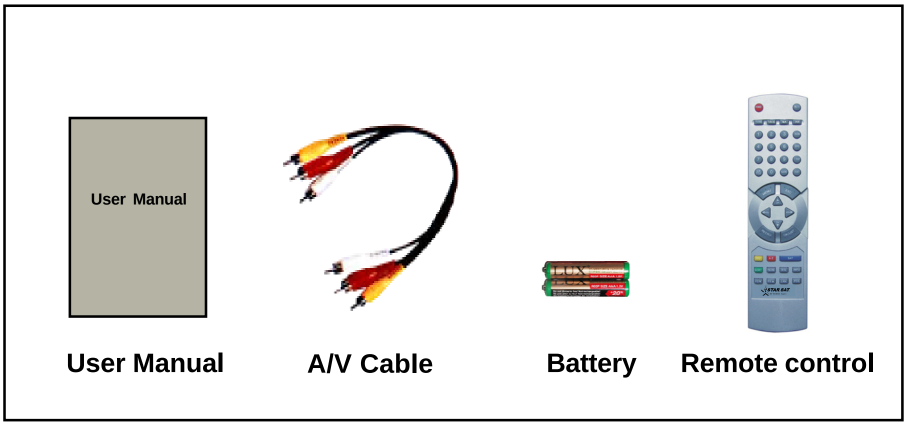


Figure 1. Accessories

2. Basic Function

2.1 Front Panel

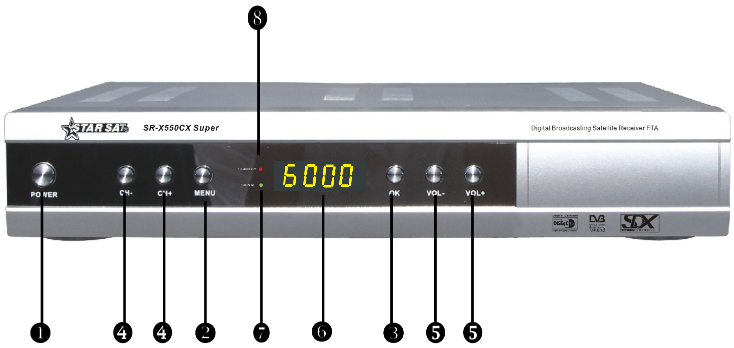


Figure 2. Front Panel

1. Power Button
The POWER button is used to turn the power on or to make it on Standby Mode.

2. MENU Button
Activate the main menu in viewing mode, or exit all menu.

3. OK Button
Activate the highlighted sub menu in menu mode and activate the channel list in viewing mode.

4. Up/Down Button▲/▼
Change channel in viewing mode and move the cursor up/down in menu mode.

5. Left/Right Buttont◀/▶
Increase / decrease the volume in viewing mode and change settings in menu mode

6. Display (4-digi 7-segment)
4-digi displays channel information. In Standby mode the 7-segment displays local time.

7. Power LED
Power indicator

8. Lock LED
Signal Indicator

2.2 Rear Panel

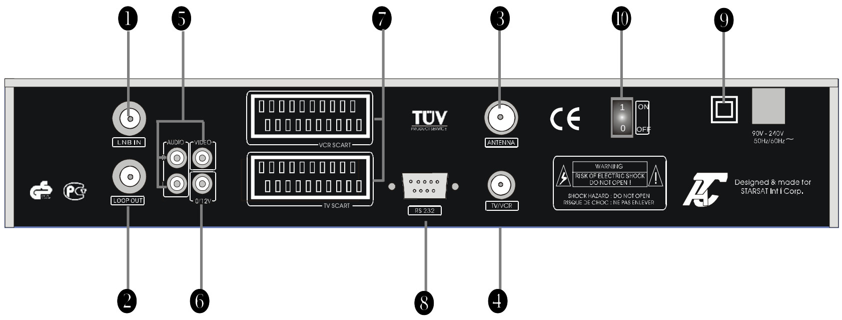


Figure 3. Rear Panel

1. LNB IN 13/18V 500mA Max
Connect the Satellite Dish LNB.

2. LOOP OUT
Output the Dish LNB IN signal.

3. ANT
Connect to TV Antenna

4. RF OUT
Connect to a conventional TV.

5. AUDIO, VIDEO
Connect to Audio/Video of TV. Connect Yellow to Video port, connect Red and
White to Audio Right and Audio Left.

6. 0/12V
Supply 12V DC to other apparatus.

7. TV SCART, VCR SCART
Connect to TV set or VCR player with Scart cables.

8. RS232
Connect to serial port of PC for software upgrade.

9. Electric Inlet Lead
Mains 90~240V AC (Auto selectable), 50~60Hz, Make sure to check the power spec.

10. Power
AC Power Switch.

2.3 Remote Control Unit(RCU)

You can control this receiver by this remote controller with full function.

1. POWER :

Switch the receiver on or set it to standby mode.

2. MUTE :

Turn the sound On/Off.

3.TV/DBS:

Switch between TV and receiver

4. VCR/DBS:

Switch between VCR and DBS

5. TV/RADIO :

Switch between TV and RADIO.

6.M.P:

Multi pictures, press M.P. you will get the selection of Multi pictures, 4/9/10/12/16

7. NUMERIC KEY (0~9) :

Change program or input number.

8.ZOOM :

Picture Zooming function.

9. EPG (Electronic Program Guide) :

Show the TV/Radio program guide.

10.T.TEXT :

Show the teletext content if teletext is transmitted.

11.EDIT:

Go to TV Guide Menu Directly or Radio Guide Menu Directly

12.SUBTITLE :

Showing Subtitle information if the channels contains.

13.AUDIO :

Select or change the Audio.

14. MENU :

Activate main menu or exit to live channel.

15.ESC :

Exit current menu step by step.



Figure 4. Remote Control

16.CH▲/▼:

Change program.

17.VOL◀/▶:

Change volume in viewing mode.

18. RECALL:

Move to the previous viewed channel.

19. OK/LIST

Confirming the selection, or you can get channel list when in viewing mode.

20. FAV:

To get favorite channel list you set before.

21. A~Z:

Sort channels

22. SAT:

Show the scanned satellite list.

23.Sort:

You can sort channels by CA system

24.PAUSE:

Freeze the picture.

25.S/Q:

Show the signal and quality of the channel

26.INFO:

Show the information of the current channel.
press EXIT button to exit this menu.

27.Page, PG▲, PG▼:

Page up/down on menu.

28. LAN:

You can set audio language here.

29.POS:

Press POS, go to motorised system menu directly

3. Installation and Connection

The following diagram shows you the connections among receiver, TV, LNB and other equipment, please read this first if you are not sure about the connection, and it will guide you to the correct connection.

3.1 Connecting to TV

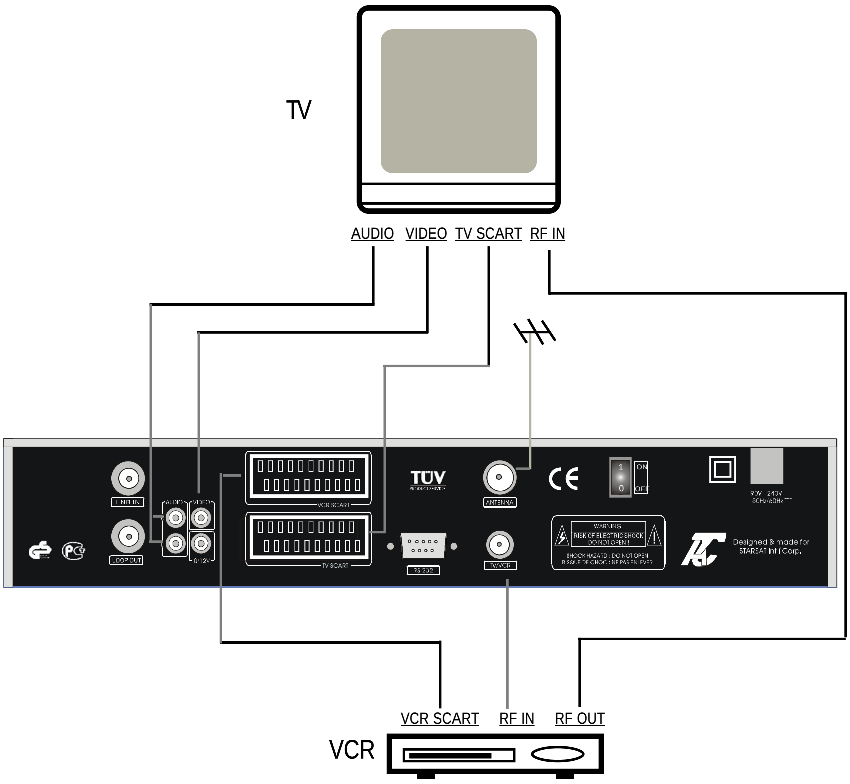


Figure 5. Connecting to TV & VCR

3.2 Connecting to Dish LNB

You can connect one fixed dish LNB directly to the LNB IN, or connect at least two dish LNB by DiSEqC Switch, you can also connect to HH mount dish LNB.

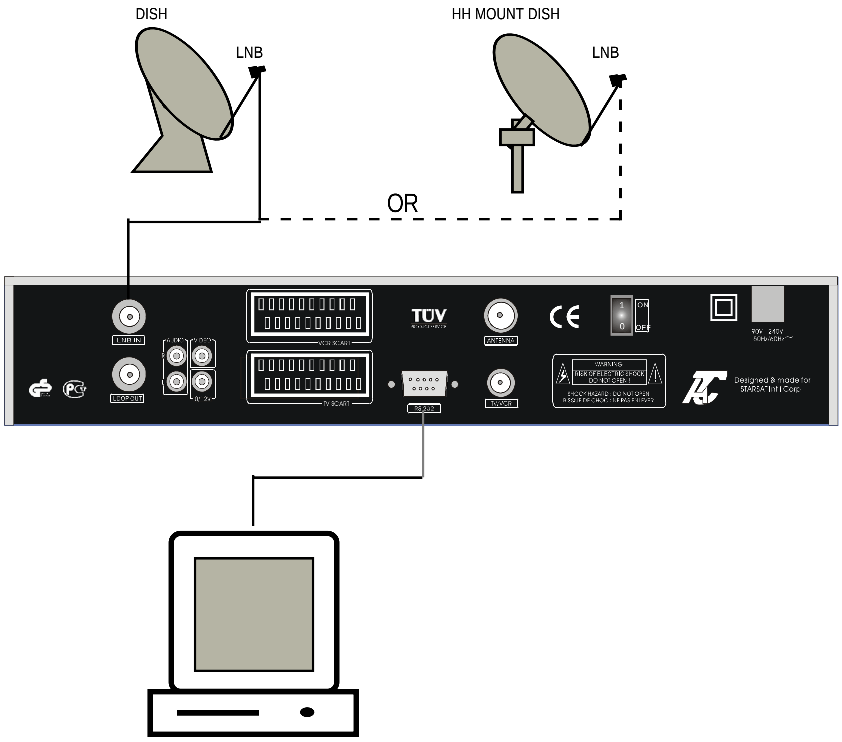


Figure 6. Connecting to Dish LNB

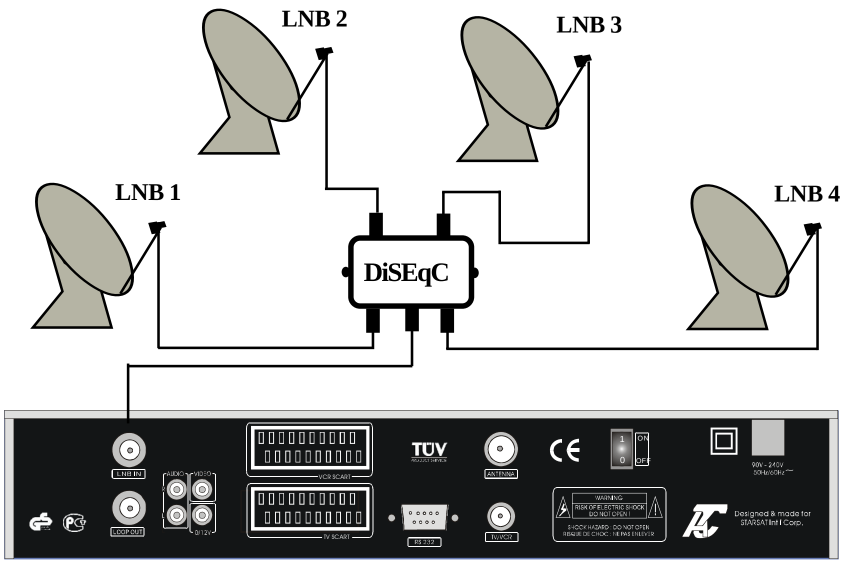


Figure 7. Connecting to Dish LNB

4. Installation and Operation

Ater connecting the receiver to other required equipment, turn on the receiver, there should be no channel information available at the first startup, you need to follow the procedure to setup your receiver to search the channel.

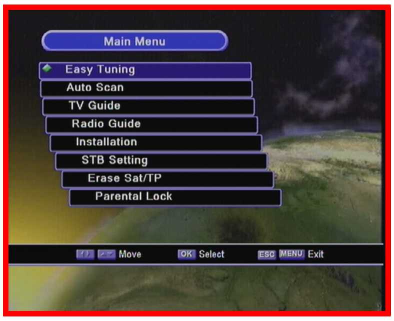
4.1 Menu Guide

During the installation there is a short information showed at the bottom of the menu screen which will guide you to set up, after finishing installation, you can enjoy watching TV or listening to Radio.

--Main Menu--

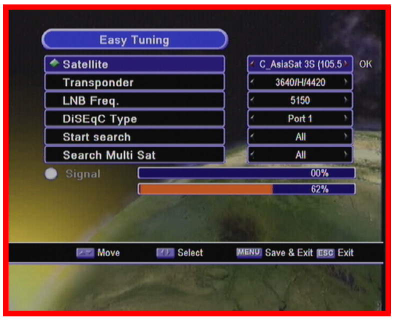
☛ **Main Menu**

Press **MENU** button to activate main menu, main menu consists of **Easy Tuning ,Auto Scan,TV Guide, Radio Guide, Installation, STB Setting, Erase Sat/TP,** and **Parental Lock**



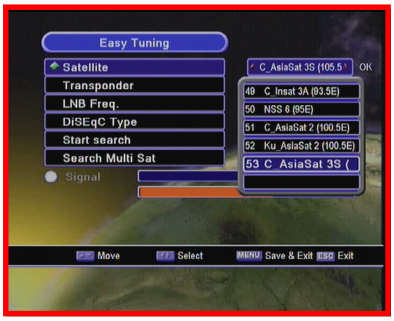
☛ **Easy Tuning**

Use ▲/▼ button to select item, use ◀ /▶ to change setting. This function will enable multi satellite search if your receiver connects to DiSEqC Switch.



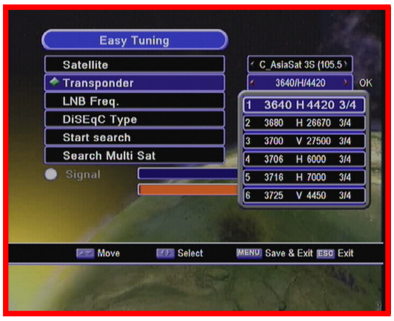
🗁 **Satellite**

This window shows the pre-stored satellite list, you can change satellite by ◀ /▶ , press **OK** to see the satellite list and select satellite.



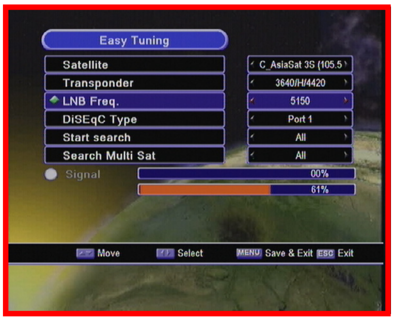
Transponder

If you change the satellite, the transponder will be changed automatically .You will find the transponder list of selected satellite here by pressing **OK**.



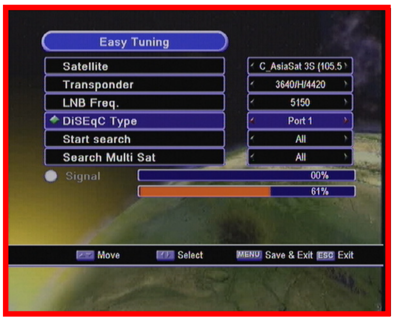
LNB frequency and power

Here you need to check the LNB frequency according to your antenna, set the correct frequency or define yourself, and keep LNB power to be 13V/18V.



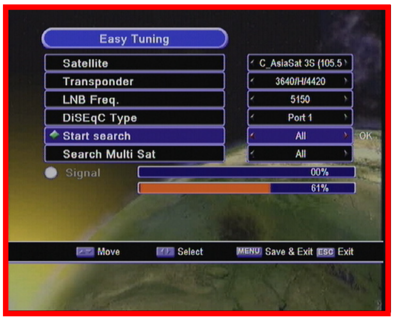
DiSEqC Type

If you connect antenna to DisEqc Switch, you need to set DisEqc Type .



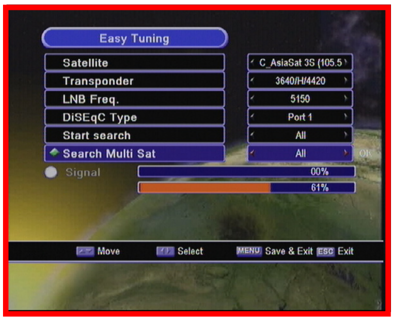
Start Search

After Setup and selection,pressing OK will start searching.

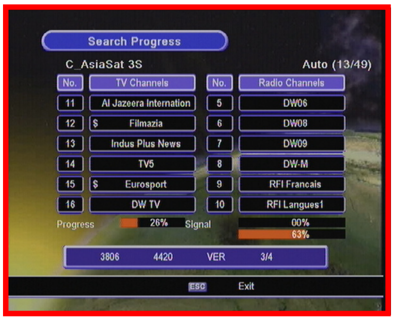


Search Multi Sat

Here,press OK button you can see the satellite list .Then you can select multi satellites to search.

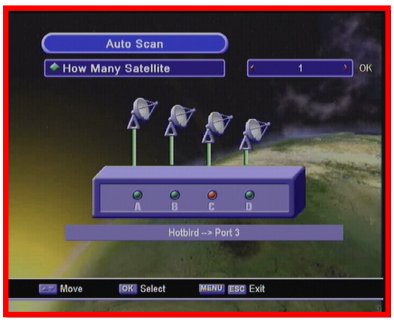




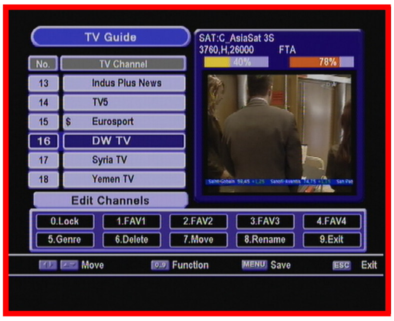


☛ Auto Scan

In this menu , **If you connect antenna to DisEqc Switch,This function will check DisEqc Type automatically.**



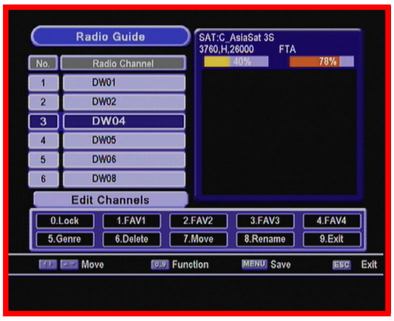
TV Guide



Edit Channel

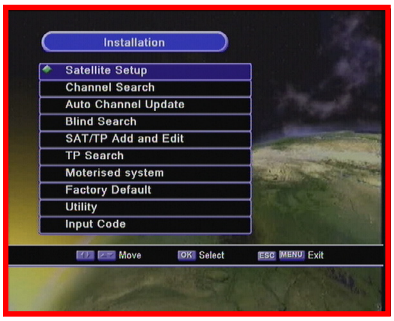
Here you can select TV channel and Lock it,add it to fav list, Genre,Delete,Move,and rename this channel.

Radio Guide



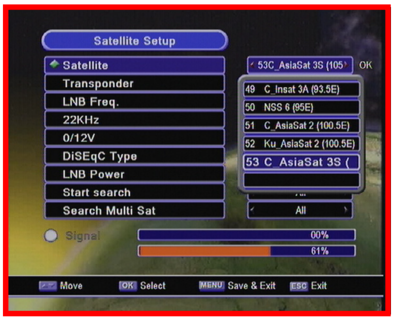
Here you can select RADIO channel and Lock it,add it to fav list, Genre,Delete,Move, and rename this channel.

Installation



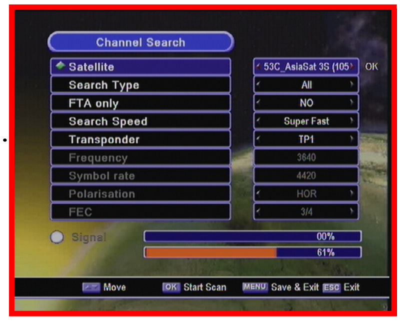
Select **Installation,** the sub menu will be displayed, here you can setup Satellite Setup,Channel Search ,Auto Channel Update,Blind Search,SAT/TP Add and Edit, TP Search,Moterised System,Factory Default,Utility .

Satellite Setup

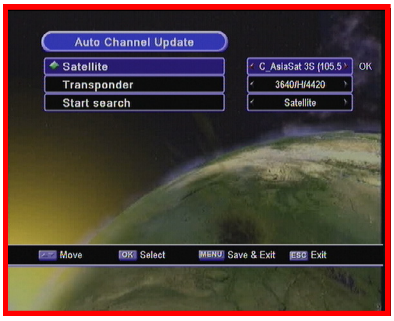


You can select Satellite and Transponder to setup LNB Freq,22 KHz, 0/12V,DiSEqC Type,LNB Power.then use Start Search, Search Multi Sat to search channels.

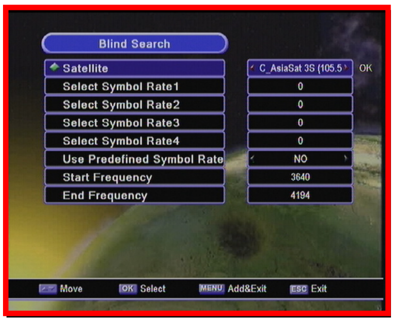
Channel Search
You can select satellite with ◀/▶button.
and if you want , you can adjust Search
Type ,FTA only,Search Speed,Transponder.



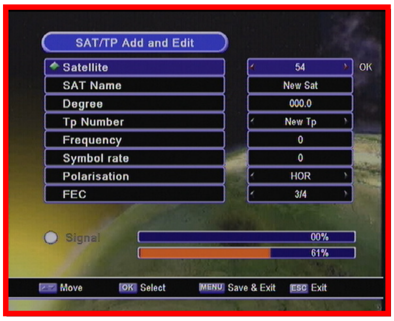
Auto Channel Update
You can select satellite and Transponder
with ◀/▶button,and then Press OK button
on Start search to search channels .



Blind Search
If you want to use Blind Search,please
press OK key.Please insert Symbol Rate
and Start Frequency & End Frequency,
then if you press OK on "Start Scan",it will
start to search for that symbol rate
between start & end frequency.

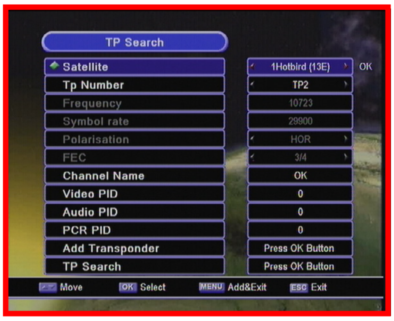


SAT/TP Add and Edit
In this Menu, you can setup the SAT/TP
that you select.



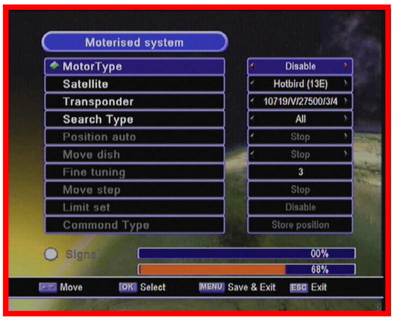
TP Search

In this Menu,you can select frequency,or input new frequency by RCU to TP search. and also you can search by setting the Audio PID,Video PID,PCR PID .



Moterised system

If you connect receiver to DiSEqC 1.2 or DiSEqC 1.3 antenna, set **Motorised system** to **DiSEqC1.2** or **USALS,** you can change the direction of the dish to aim to the satellite you selected through the option.



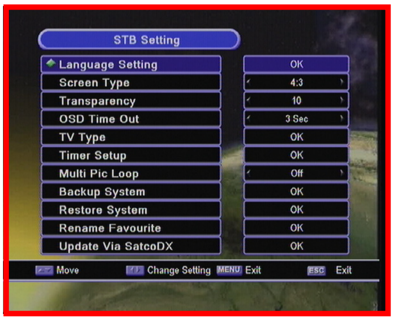
Utility

There are four games stored in the receiver, tetris, Hex a,snake, Gobang(Fi v e Chess), you can play with the remote control by ▲/▼and◀/▶button.



STB Setting

Press OK on the STB Setting in **Main Menu** you will get the following windows to guide you to setup the STB.
You can setup Screen Type ,Transparency , OSD Time Out etc.(with ◀/▶button)



Language Setting

You can select menu Language,Audio Language with ◀/▶button.



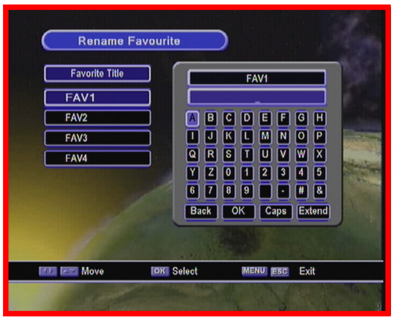
Timer Setup

In this Menu ,you can setup time According to your time zone.and setup Sleep Timer, Wakeup Time etc.(Input by RCU)



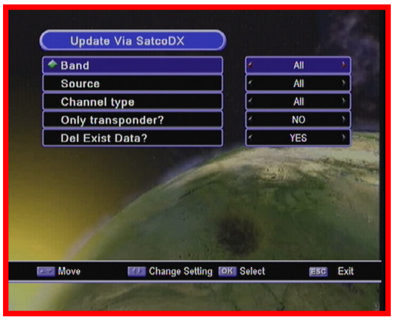
Rename Favourite

In this Menu ,you can rename your Favorite .



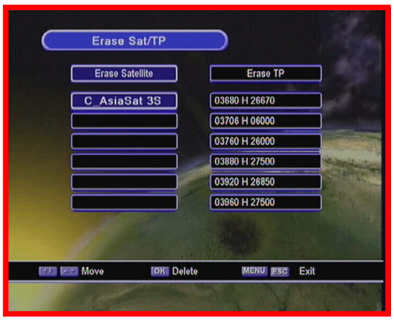
Update Via SatcoDX

By this function you can download the satellite list,transponder list and channel list from the internet (www.satcodx.com),if you have subscribed to the TELE_satellite International.



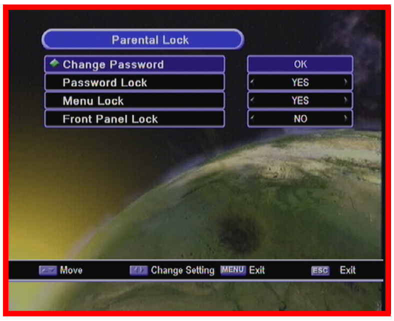
Erase Sat/TP

In this Menu ,you can delete channels According to Sat/TP.



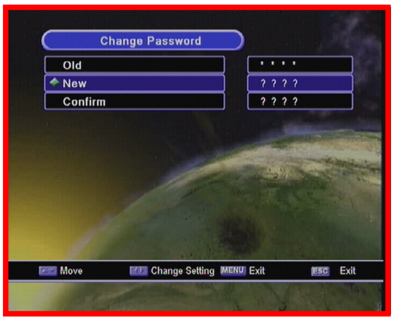
Parental Lock

You can select if need the password or not for channel ,Menu,Front Panel.



Change Password

You can change the password,the default password is 0000.



4.2 Other Useful Information

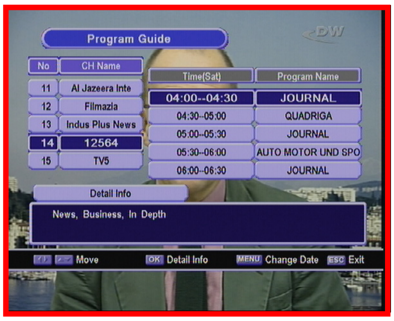
This will guide you on how to use general info while watching TV program or listening Radio program.



ZOOM:

Picture Zooming function.

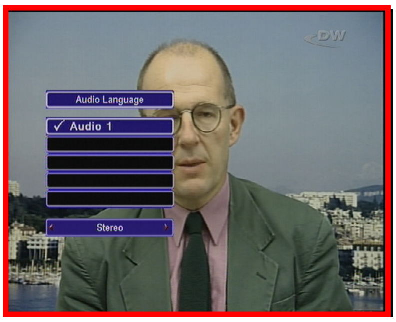
EPG



🗐 Press **EPG** button on remote control, you can get the electronic program guide if applicable. Press ◀/▶ to see the headline for each program

🗐 You can press **TV/RADIO** to change to TV/RADIO.

AUDIO or LANG



In viewing mode press **AUDIO** or **LANG** button and you will get a menu, you can set the Audio mode here and change.

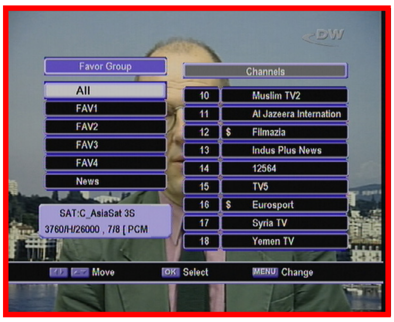
SUB TITLE



Showing Subtitle information if the

channels contains.

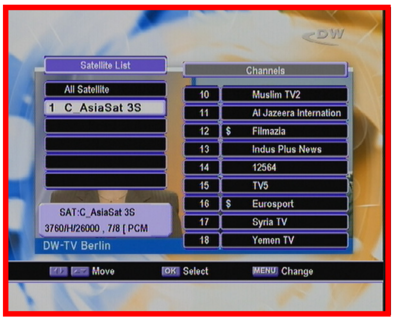
FAV



In viewing mode, you can get the favorite channel group by pressing **FAV,** press **MENU** key to change the active list then press ▲/▼ to change category or channel. If you did not set favorite channel in advance, it will show empty channel list .

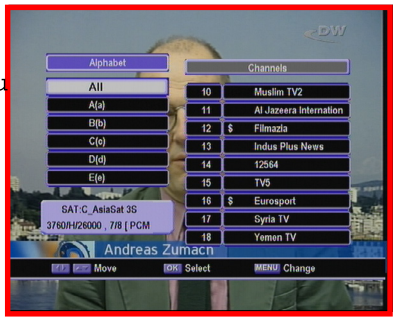
SAT

Press **SAT** button on the remote control, you will get this menu which contains the satellites you searched and stored, press **MENU** key to switch between satellites list and channel list. all channels will be listed under that satellite you selected.



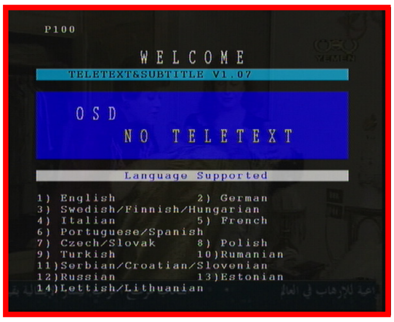
A-Z

Press **A-Z** button on the remote control, you will get this menu which contains the satellites you searched and stored, press **MENU** key to switch between alphabet list and channel list. all channels will be listed under that alphabet you selected.



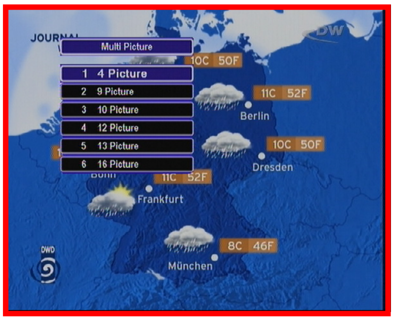
Teletext

Press the **T.TEXT** button and you will get a window to view the teletext contents if the teletext is transmitted in the channel. The Teletext content is watchable by OSD even your TV does not support the Teletext.



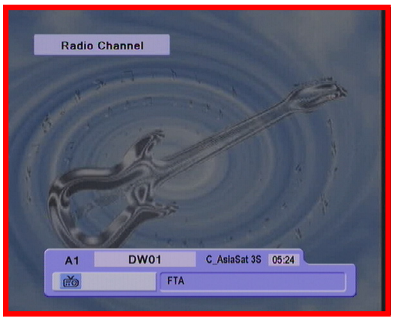
Multi Picture

In viewing mode ,press **M.P.** you will get the multi picture selection ,select one and press ok ,multi picture will be displayed. Move up/ down, left/right to select channel,press **M.P.** again to get that selected channelpop out and it is living ,press ok to display it in full screen or exit to select other channel.



INFO

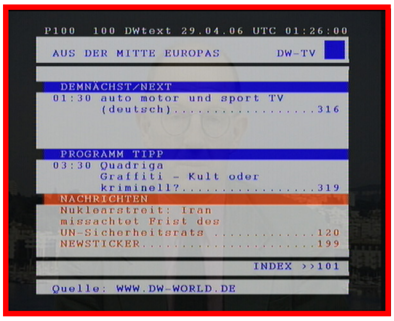
Press **INFO** button,the info bar will pop up, it contains satellite and channel information



S/Q

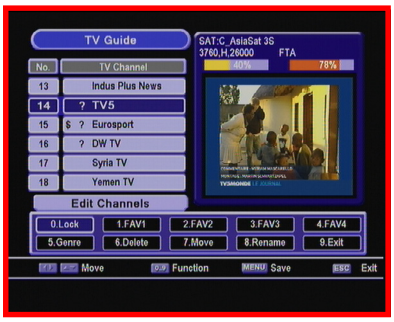
Press **S/Q** button, you will get the signal and quality info bar, tells you how the signal and quality of the channel is.





Edit

Press **EDIT** ,go to TV Guide Menu Directly or Radio Guide Menu Directly



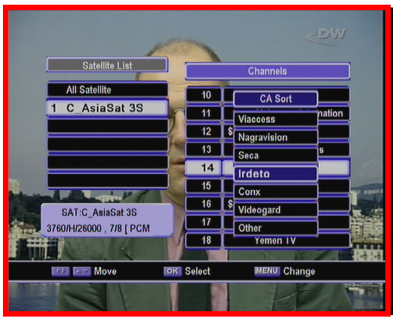
Recall

Press Recal button and you can get the viewed history channel.maximum it can list 15 channels that you recently viewed.



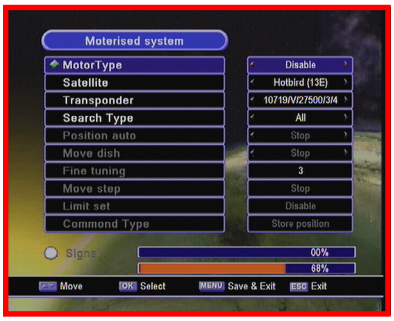
SORT

You can sort channels by CA System



POS

Press POS ,go to motorised system menu directly



5. Additional Information

5.1 Problem Solving

You might meet abnormal working of this STB with various reasons, check the following which may help you.

Problem	Possible causes	What to do
LED on the front panel fail to light up/is not lit.	Mains supply cable is not connected.	Check if the mains supply cable is plugged into the power socket.
No picture or sound.	Satellite dish is not aiming to satellite accurately. No signal or weak signal. The LNB is faulty. The cable is faulty.	Adjust the dish. Check the signal strength indicator in one of the channel search submenus. Check the cable connections,LNB and other equipment connected to LNB & receiver, or adjust dish. Replace the LNB. Replace the cable.
Bad picture/blocking error.	Satellite dish is not aiming to the satellite accurately Signal too strong. Satellite dish is too small. LNB noise factor too high. The LNB is faulty.	Adjust the dish. Connect a attenuator to LNB input. Change to a larger dish. Change LNB with lower noise factor. Replace the LNB.
No startup menu on screen after turning on STB for the first time.	The system is connected by SCARTcables and the TV is not in AV/EXTmode.	Switch the TV to the appropriate AV input.
The remote control is not working.	Battery exhausted. Remote control is not aimed correctly STB is in standby mode.	Change the batteries (both). Aim the remote control at the STB. Check that nothing blocks the front panel. Check if LED indicator on the front panel is showing the time, press the power button to switch off standby mode.
You have forgotten your password.		Contact the dealer or Service Provider. They will help you set it up again.
Poor picture quality orLess channels in scanning.	Low LNB power or singal loss in cable.	Change the LNB power to 14V/19V in Antenna setup menu.

5.2 Technical Specification

Tuner & Demodulator

Frequency Range	950 MHz to 2150 MHz
Input Connector	F-type, IEC 169-24, Female
Signal Level	-25 to -65 dBm
RF Impedance	75¦¸unbalanced
IF Band width	55 MHz/8Hz(Per 5Msps)
LNB Power & Polarisation	Vertical : +13 V, 14V +/-5% Horizontal : +18 V, 19V+/-5% Current : 500 mA Max. Overload Protection
LNB Tone Switch	22KHz+/-2KHz, 0.6Vpp+/-0.2V
DiSEqC Control	Version 1.0/1.2 Compatible, Tone burst A/B
Demodulation	QPSK
Symbol Rate	1~45Ms/s/SCPC,MCPC
FEC Decode	Convolutional Code Rate 1/2, 2/3, 3/4, 5/6 and 7/8 with Constraint Length K=7

MPEG

Transport Stream	MPEG-2 ISO/IEC 13818Transport stream specification
Profile Level	MPEG-2 MP@ML
Input Rate	15 Mbit/s Max
Aspect Ratio	4:3, 16:9
Video Resolution	720 x 576(PAL), 720*480(NTSC)
Audio Decoding	MPEG/MusiCam Layer I & II
Audio Mode	Single channel/Dual channel/Joint stereo/Stereo
Sampling	32, 44.1 and 48 KHz

A/V and Data In/Out Connector

TV SCART	RGB, CVBS, L, R out
VCR SCART	CVBS, L, R out, AUDIO L, R.
3RCA	AUDIO L, R. VIDEO out.
RS-232C	RS232C D-sub male type.
LNB IF Input	F type, IEC 169-24 Female
LNB IF Output	F type, IEC 169-24 Female

RF-Modulator

RF Connector	75¦¸IEC169-2, Male/Female
RF Frequency	470MHz-860MHz
Output Channel	CH21-69
TV Standard	PAL B/G, I, D/K Selectable

Power Supply

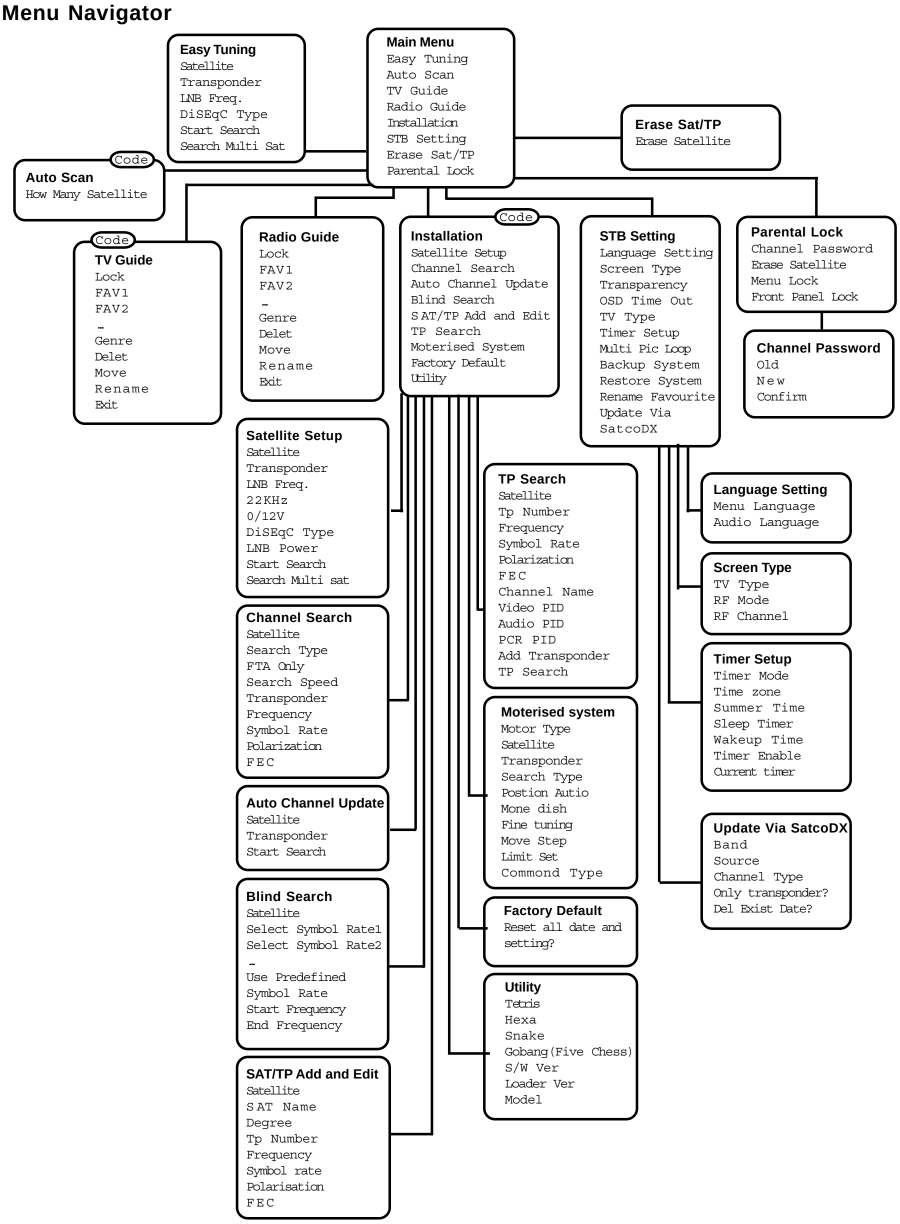
Input Voltage	90 - 240V AC, 50/60 Hz
Power Consumption	Max. 25 W
Protection	Separate internal fuse. Input shall have lightening Protection

Physical Specification

Size (W x H x D)	340x355x57mm
Weight (Net)	Around 2.0 kg
Operating Temp	0¡æ to + 40¡æ
Storage Temp	-40¡æto + 65¡æ

5.3 Menu Screen Structure

Menu Navigator



5.4 Glossary

Antenna
A device that collects and radiates electromagnetic waves. Includes a satellite dish and abroadband antenna.

DiSEqC
DiSEqC(Digital Satellite Equipment Control)system, it is a communication bus between satellite receivers and peripheral equipment using only the existing coaxial cable .

DVB
The Digital Video Broadcast group was created to establish a technical framework for the introduction of digital video broadcasting systems.

LNB (low-noise block converter) or LNBF
An electronic unit mounted on the satellite dish. It receives the signals reflected by the dish and converts them to signals that can be used by the digital satellite receiver.

GHz
The prefix giga means milliard, and Hertz means cycles per second. Signals in the GHz range are often called microwaves.

MHz
The prefix mega means million, and Hertz means cycles per second.

MPEG
Moving Picture Experts Group. Established by the International Standards Organisation to provide the basis for a picture coding and compression system.

Forward Error Correction(FEC)
A system of error control for data transmission.

PID(Packet Identifier)
A set of numbers that idenitifies transport stream packets containing data from a single data stream.

Polarisation
Polarisation allows several programmes to be fit into the same frequency band. The signals from a satellite are transmitted either with linear (vertical or horizontal) polarisation or circular (right or left) polarisation.

🗐 QPSK(Quaternary Phase Shift Keying)
Phase-shift keying in which four different phase angles are used.

🗐 Transponder
An automatic device that receives, amplifies and retransmits a signal on a different frequency.

🗐 Symbol rate
Speed of the digital transmission

🗐 RF
Radio frequency (known as HF in some countries).

🗐 RGB
Red, Green, Blue. Colour signals are routed in separatecables in order to provide a high quality TV picture.

🗐 Scrambled TV programme
Some TV programmes are transmitted in scrambled form.

🗐 SERIAL RS 232
A serial communication standard data port.

🗐 SCART
A 21-pin connector used for connection of the receiver,VCR and TV.Also named Euroconnector or Peritel connector.

🗐 S/PDIF
Sony/Philips Digital Interface Format. Digital audio output.

🗐 RCA
Coaxial connector used to connect the receiver to an external amplifier.